L. Helms

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PAGE: 1

46

RAW SEQUENCE LISTING PATENT APPLICATION US/09/618,380

DATE: 11/09/2001 TIME: 21:36:50

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This Raw Listing contains the General

Information Section and up to the first 5 pages.

SEQUENCE LISTING 1 2 General Information: 3 (1) 5 (i) APPLICANT: Weiner, George 6 Gingrich, Roger 7 Link, Brian Tso, J. Yun 8 9 10: (ii) TITLE OF INVENTION: Bispecific Antibody Effective to Treat 11 B-Cell Lymphoma and Cell Line 12 (iii) NUMBER OF SEQUENCES: 14 13 14 15 (iv) CORRESPONDENCE ADDRESS: (A) ADDRESSEE: Townsend and Townsend and Crew 16 (B) STREET: One Market Plaza, Steuart Tower, Suite 2000 17 (C) CITY: San Francisco 18 (D) STATE: California 19 (E) COUNTRY: USA 20 (F) ZIP: 94105 21 22 23 (v) COMPUTER READABLE FORM: (A) MEDIUM TYPE: Floppy disk 24 (B) COMPUTER: IBM PC compatible 25 (C) OPERATING SYSTEM: PC-DOS/MS-DOS 26 27 (D) SOFTWARE: PatentIn Release #1.0, Version #1.25 28 29 (vi) CURRENT APPLICATION DATA: (A) APPLICATION NUMBER: US 08/397,411 30 (B) FILING DATE: 01-MAR-1995 31 (C) CLASSIFICATION: 32 33 34 (vii) PRIOR APPLICATION DATA: 35 (A) APPLICATION NUMBER: US 07/859,583 36 (B) FILING DATE: 27-MAR-1992 37 38 (viii) ATTORNEY/AGENT INFORMATION: 39 (A) NAME: Smith, William M. 40 (B) REGISTRATION NUMBER: 30,223 (C) REFERENCE/DOCKET NUMBER: 011823-004901 41 42 (ix) TELECOMMUNICATION INFORMATION: 43 (A) TELEPHONE: 415-326-2400 44 45 (B) TELEFAX: 415-326-2422

RAW SEQUENCE LISTING PATENT APPLICATION US/09/618,380

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47																		
48	(2)	INFO	RMATION FOR SEQ ID NO:1:															
49 50		(+)	CECITENCE CUADACTEDICTICS.															
51		(1)	_	SEQUENCE CHARACTERISTICS: (A) LENGTH: 107 amino acids														
52				(A) LENGTH: 107 amino acids (B) TYPE: amino acid														
53				(C) STRANDEDNESS: single														
54			(D) TOPOLOGY: linear															
55																		
56		(ii)	MOL	MOLECULE TYPE: peptide														
57																		
58																		
59		, .,																
60		(X1)	SEQ	SEQUENCE DESCRIPTION: SEQ ID NO:1:														
61		7.00	т	Cl n	Mot	Th∽	@1 n	Cox	Dro	Cox	C.~	T 011	60*	. ד ת	Cox	v. 1	C1.,	
62 63		Asp 1	TIE	GIII	Mec	5	GIII	ser	PIO	ser	10	цец	ser	Ата	ser	15	Gly	
64		_				,					10					13		
65		Asp	Arσ	Val	Thr	Ile	Thr	Cvs	Ara	Ala	Ser	Glu	Asn	Ile	Tvr	Ser	Tvr	
66					20			070	5	25					30		-1-	
67																		
68		Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Val	
69				35					40					45				
70																		
71		Ser		Ala	Lys	Thr	Leu		Glu	Gly	Val	Pro		Arg	Phe	Ser	Gly	
72			50					55					60					
73 74		Cox	c1	Cox	C1	T	C15	Dho	The	T 011	πb∝	т1.	Cor	602	T 011	C12	Dro	
74 75		65	GIY	ser	GIA	пуs	70	Pne	TIIT	neu	1111	75	ser	Ser	ьeu	GIII	80	
76		0.5					, 0					,,					00	
77		Glu	Asp	Phe	Ala	Thr	Tvr	Tvr	Cvs	Gln	His	His	Tyr	Gly	Asn	Ser	Tyr	
78						85	4	•	•	-	90		•	•		95	•	
79																		
80		Pro	Phe	Gly	Gln	Gly	Thr	Lys	Leu	Glu	Ile	Lys						
81					100					105								
82	(-)																	
83	(2)	INFO	KMA'I'	LON 1	OR S	SEQ I	LD NO):2:										
84 85		(i)	SEO!	TENCE	CUI	ARACT	ידסדי	ייידרי	2.									
86		(1)	. ~ .			107				3								
87						amino				•								
88						EDNES			le		•						•	
89			(D)	TOE	POLOG	3Y:]	linea	ar										
90																		
91		(ii)	MOLE	CULE	TYP	PE: p	epti	ide										
92																		
93																		
94		(mi)	e Por	וביאי <i>ר</i> ים	י אור י	ירסדי	יי דיייני	1. CT	יר די) NO.								
95 96		(xi)	ಎದಿ೧೧	PINCE	. DES	CKIE	TIOL	v: 51	יע גנ	, NO:	4 :							
97		Asp	Ile	Gln	Met	Thr	Gln	Ser	Pro	Ala	Ser	Leu	Ser	Ala	Ser	Val	Gly	
98		1				5					10					15	1	
99														•				

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RAW SEQUENCE LISTING PATENT APPLICATION US/09/618,380

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100		Glu	Thr	Val	Thr	Ile	Thr	Cys	Arg	Ala	Ser	Glu	Asn				
101					20			-	•	25					30		-
102																	•
103		Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Gln	Gly	Lys	Ser	Pro	Gln	Leu	Leu	Val
104				35	_				40					45			
105																	
106		Ser	Asn	Ala	Lys	Thr	Leu	Ala	Glu	Gly	Val	Thr	Ser	Arg	Phe	Ser	Gly
107			50					55					60				
108																	
109		Ser	Gly	Ser	Gly	Lys	Gln	Phe	Ser	Leu	Lys	Ile	Asn	Ser	Leu	Gln	Pro
110		65					70					75					80
111																	
112		Glu	Asp	Phe	Ala	Thr	Tyr	Tyr	Cys	Gln	His	His	Tyr	Gly	Asn	Ser	Tyr
113						85					90					95	
114																	
115		Pro	Phe	Gly	Gly	Gly	Thr	Lys	Leu	Glu	Ile	Lys					
116					100					105							
117			•														
118	(2)	INFO	RMAT:	ION I	FOR S	SEQ :	ID N	0:3:									
119																	
120		(i)		JENCI													
121			(A)) LEI	NGTH	: 116	am:	ino a	acids	3							
122			(B)	TYI)	PE: a	amino	ac:	id									
123) STI				_	Le								
124			(D)) TO	POTO	3Y: .	linea	ar									
125																	
126		(44)	MOT														
10-	(ii) MOLECULE TYPE: peptide																
127		(11)	MOLI	ECOT!	S TY	PE: p	pept:	ıae									
128		(11)	MOL	ECOT!	S TY	PE: p	pept:	ıae									
128 129							-										
128 129 130		(xi)					-		EQ II	O NO	:3:						
128 129 130 131		(xi)	SEQ	JENCI	E DES	SCRII	PTIO	1: SI									
128 129 130 131 132		(xi) Gln	SEQ		E DES	SCRII Gln	PTIO	1: SI			Gly	Leu	Val	Lys	Pro		Glu
128 129 130 131 132 133		(xi)	SEQ	JENCI	E DES	SCRII	PTIO	1: SI				Leu	Val	Lys	Pro	Ser 15	Glu
128 129 130 131 132 133		(xi) Gln 1	SEQ Val	JENCI Gln	E DES	Gln 5	PTIO1 Glu	N: SI Ser	Gly	Pro	Gly 10					15	
128 129 130 131 132 133 134 135		(xi) Gln 1	SEQ Val	JENCI	E DES Leu Leu	Gln 5	PTIO1 Glu	N: SI Ser	Gly	Pro Ser	Gly 10				Thr	15	
128 129 130 131 132 133 134 135		(xi) Gln 1	SEQ Val	JENCI Gln	E DES	Gln 5	PTIO1 Glu	N: SI Ser	Gly	Pro	Gly 10					15	
128 129 130 131 132 133 134 135 136		(xi) Gln 1 Thr	SEQU Val Leu	JENCE Gln Ser	E DES Leu Leu 20	Gln 5 Thr	Glu Cys	N: SI Ser Thr	Gly Val	Pro Ser 25	Gly 10	Phe	Ser	Leu	Thr 30	15 Asn	Tyr
128 129 130 131 132 133 134 135 136 137		(xi) Gln 1 Thr	SEQU Val Leu	JENCI Gln Ser His	E DES Leu Leu 20	Gln 5 Thr	Glu Cys	N: SI Ser Thr	Gly Val Ser	Pro Ser 25	Gly 10	Phe	Ser	Leu Leu	Thr 30	15 Asn	Tyr
128 129 130 131 132 133 134 135 136 137 138		(xi) Gln 1 Thr	SEQU Val Leu	JENCE Gln Ser	E DES Leu Leu 20	Gln 5 Thr	Glu Cys	N: SI Ser Thr	Gly Val	Pro Ser 25	Gly 10	Phe	Ser	Leu	Thr 30	15 Asn	Tyr
128 129 130 131 132 133 134 135 136 137 138 139 140		(xi) Gln 1 Thr	SEQU Val Leu Val	Gln Ser His 35	E DES Leu Leu 20 Trp	Gln 5 Thr	Glu Cys Arg	N: SI Ser Thr Gln	Cly Val Ser	Pro Ser 25 Pro	Gly 10 Gly	Phe Lys	Ser Gly	Leu Leu 45	Thr 30 Glu	15 Asn Trp	Tyr Ile
128 129 130 131 132 133 134 135 136 137 138 139 140 141		(xi) Gln 1 Thr	SEQU Val Leu Val	JENCI Gln Ser His	E DES Leu Leu 20 Trp	Gln 5 Thr	Glu Cys Arg	N: SE Ser Thr Gln Gly	Cly Val Ser	Pro Ser 25 Pro	Gly 10 Gly	Phe Lys	Ser Gly Asn	Leu Leu 45	Thr 30 Glu	15 Asn Trp	Tyr Ile
128 129 130 131 132 133 134 135 136 137 138 139 140 141		(xi) Gln 1 Thr	SEQU Val Leu Val	Gln Ser His 35	E DES Leu Leu 20 Trp	Gln 5 Thr	Glu Cys Arg	N: SI Ser Thr Gln	Cly Val Ser	Pro Ser 25 Pro	Gly 10 Gly	Phe Lys	Ser Gly	Leu Leu 45	Thr 30 Glu	15 Asn Trp	Tyr Ile
128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143		(xi) Gln 1 Thr Gly Gly	SEQU Val Leu Val Val	Gln Ser His 35 Lys	E DES Leu Leu 20 Trp	Gln 5 Thr Val	Glu Cys Arg	N: SI Ser Thr Gln Gly 55	Gly Val Ser 40 Ser	Pro Ser 25 Pro Thr	Gly 10 Gly Gly	Phe Lys Tyr	Ser Gly Asn 60	Leu Leu 45 Ala	Thr 30 Glu Ala	15 Asn Trp Phe	Tyr Ile Ile
128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144		(xi) Gln 1 Thr Gly Gly Ser	SEQU Val Leu Val Val	Gln Ser His 35	E DES Leu Leu 20 Trp	Gln 5 Thr Val	Cys Arg Gly Ser	N: SI Ser Thr Gln Gly 55	Gly Val Ser 40 Ser	Pro Ser 25 Pro Thr	Gly 10 Gly Gly	Phe Lys Tyr Lys	Ser Gly Asn 60	Leu Leu 45 Ala	Thr 30 Glu Ala	15 Asn Trp Phe	Tyr Ile Ile Leu
128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144		(xi) Gln 1 Thr Gly Gly	SEQU Val Leu Val Val	Gln Ser His 35 Lys	E DES Leu Leu 20 Trp	Gln 5 Thr Val	Glu Cys Arg	N: SI Ser Thr Gln Gly 55	Gly Val Ser 40 Ser	Pro Ser 25 Pro Thr	Gly 10 Gly Gly	Phe Lys Tyr	Ser Gly Asn 60	Leu Leu 45 Ala	Thr 30 Glu Ala	15 Asn Trp Phe	Tyr Ile Ile
128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144		(xi) Gln 1 Thr Gly Gly Ser 65	SEQUE Val	JENCI Gln Ser His 35 Lys	Leu Leu 20 Trp Trp	Gln 5 Thr Val Ser	Cys Arg Gly Ser	N: SI Ser Thr Gln Gly 55 Lys	Cly Val Ser 40 Ser	Pro Ser 25 Pro Thr	Gly 10 Gly Glu ser	Phe Lys Tyr Lys 75	Ser Gly Asn 60 Asn	Leu Leu 45 Ala Gln	Thr 30 Glu Ala Val	Asn Trp Phe Ser	Tyr Ile Ile Leu 80
128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147		(xi) Gln 1 Thr Gly Gly Ser 65	SEQUE Val	Gln Ser His 35 Lys	Leu Leu 20 Trp Trp	GCRII Gln 5 Thr Val Ser Ile	Cys Arg Gly Ser	N: SI Ser Thr Gln Gly 55 Lys	Cly Val Ser 40 Ser	Pro Ser 25 Pro Thr	Gly Gly Glu Ser	Phe Lys Tyr Lys 75	Ser Gly Asn 60 Asn	Leu Leu 45 Ala Gln	Thr 30 Glu Ala Val	15 Asn Trp Phe Ser Cys	Tyr Ile Ile Leu 80
128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147		(xi) Gln 1 Thr Gly Gly Ser 65	SEQUE Val	JENCI Gln Ser His 35 Lys	Leu Leu 20 Trp Trp	Gln 5 Thr Val Ser	Cys Arg Gly Ser	N: SI Ser Thr Gln Gly 55 Lys	Cly Val Ser 40 Ser	Pro Ser 25 Pro Thr	Gly 10 Gly Glu ser	Phe Lys Tyr Lys 75	Ser Gly Asn 60 Asn	Leu Leu 45 Ala Gln	Thr 30 Glu Ala Val	Asn Trp Phe Ser	Tyr Ile Ile Leu 80
128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148		(xi) Gln 1 Thr Gly Gly Ser 65 Lys	SEQUE Val Leu Val Val Arg Leu	JENCE Gln Ser His 35 Lys Leu Asn	Leu Leu 20 Trp Trp Thr	GCRII Gln 5 Thr Val Ser Ile Leu 85	Cys Arg Gly Ser 70	N: SI Ser Thr Gln Gly 55 Lys	Cly Val Ser 40 Ser Asp	Pro Ser 25 Pro Thr Thr	Gly Gly Glu Ser	Phe Lys Tyr Lys 75 Ala	Ser Gly Asn 60 Asn Val	Leu Leu 45 Ala Gln	Thr 30 Glu Ala Val	15 Asn Trp Phe Ser Cys 95	Tyr Ile Ile Leu 80 Ala
128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147		(xi) Gln 1 Thr Gly Gly Ser 65 Lys	SEQUE Val Leu Val Val Arg Leu	JENCI Gln Ser His 35 Lys	Leu Leu 20 Trp Trp Thr	GCRII Gln 5 Thr Val Ser Ile Leu 85	Cys Arg Gly Ser 70	N: SI Ser Thr Gln Gly 55 Lys	Cly Val Ser 40 Ser Asp	Pro Ser 25 Pro Thr Thr	Gly Gly Glu Ser	Phe Lys Tyr Lys 75 Ala	Ser Gly Asn 60 Asn Val	Leu Leu 45 Ala Gln	Thr 30 Glu Ala Val	15 Asn Trp Phe Ser Cys 95	Tyr Ile Ile Leu 80 Ala

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153 154		Thr	Val	Ser 115	Ser									INI	PUT S	SET: S	36661.
155 156	(2)	INFORMATION FOR SEQ ID NO:4:															
157 158 159 160 161 162	C	 (i) SEQUENCE CHARACTERISTICS: (A) LENGTH: 116 amino acids (B) TYPE: amino acid (C) STRANDEDNESS: single (D) TOPOLOGY: linear 															
163 164 165 166 167		(ii)	MOLECULE TYPE: peptide														
168 169		(xi)	SEQ	UENC	E DE	SCRI	PTIO	N: S	EQ I	D NO	:4:						
170 171 172		Gln 1	Val	Gln	Leu	Lys 5	Gln	Ser	Gly	Pro	Gly 10	Leu	Val	Gln	Pro	Ser 15	Gln
173 174 175		Ser	Leu	Ser	Ile 20	Thr	Cys	Thr	Gly	Ser 25	Gly	Phe	Ser	Leu	Thr 30	Asn	Tyr
176 177 178	-	Gly	Val	His 35	Trp	Val	Arg	Gln	Ser 40	Pro	Gly	Lys	Gly	Leu 45	Glu	Trp	Ile
179 180 181		Gly	Val 50	Lys	Trp	Ser	Gly	Gly 55	Ser	Thr	Glu	Tyr	Asn 60	Ala	Ala	Phe	Ile
182 183 184		Ser 65	Arg	Leu	Ser	Ile	Ser 70	Lys	Asp	Asn	Ser	Lys 75	Ser	Gln	Val	Phe	Phe 80
185 186 187		Lys	Met	Asn	Ser	Leu 85	Gln	Ala	Asp	Asp	Thr 90	Ala	Met	Tyr	Tyr	Cys 95	Ala
188 189 190		Arg	Asn	Asp	Arg 100	Tyr	Ala	Met	Asp	Tyr 105	Trp	Gly	Gln	Gly	Thr 110	Ser	Val
191 192 193		Thr	Val	Ser 115	Ser												
194 195	(2)	INFO	RMAT	ION 1	FOR S	SEQ I	ID NO	0:5:									
196 197 198 199 200 201		(i)	(A) (B) (C)	LEI TYI	NGTH PE: 8 RANDI	: 214 amino EDNES	TERIS ami caci cs: ss: stines	ino a id singl	acida	5							
202 203 204 205		(ii)	MOLE	ECUL	E TYI	PE: p	pepti	ide									

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206		(xi)	SEQ	UENC	E DE	SCRI	PTIO	N: S	EQ I	D NO	:5:						
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209		, 1	тте	GIII	Met	5	GIII	Ser	PLO	ser	10	ьeu	ser	Ala	ser	Val 15	GIY
210											10					10	
211		Asp	Ara	Val	Thr	Ile	Thr	Cvs	Ara	Ala	Ser	Glu	Asn	Ile	Tvr	Ser	Tvr
212			5		20			-1-	5	25					30		- 2 -
213																	
214		Leu	Ala	Trp	Tyr	Gln	Gln	Lys	Pro	Gly	Lys	Ala	Pro	Lys	Leu	Leu	Val
215				35	-			_	40	_	_			45			
216																	
217		Ser	Asn	Ala	Lys	Thr	Leu	Ala	Glu	Gly	Val	Pro	Ser	Arg	Phe	Ser	Gly
218			50					55					60			•	
219																	
220			Gly	Ser	Gly	·Lys		Phe	Thr	Leu	Thr		Ser	Ser	Leu	Gln	
221		65					70					75					80
222		~-3	_			_,	_	_	_		•	•	_		_	_	_
223		GIu	Asp	Phe	Ala		Tyr	Tyr	Cys	Gin		His	Tyr	GTA	Asn		Tyr
224						85					90					95	
225 226		Dro	Dho	C111	Cln	C1.,	Thr	Tarc	T 011	C111	Tla	Tarc	N ra	Thr	170.7	Ala	ח ה
227		PIO	FIIE	GIY	100	СТУ	1111	пур	цец	105	116	пуъ	Arg	1111	110	MIA	ALA
228					100					103					110		
229		Pro	Ser	Val	Phe	Tle	Phe	Pro	Pro	Ser	Asp	Glu	Gln	Leu	Lvs	Ser	Glv
230			501	115					120					125			0-7
231																	
232		Thr	Ala	Ser	Val	Val	Cys	Leu	Leu	Asn	Asn	Phe	Tyr	Pro	Arq	Glu	Ala
233			130				•	135					140		_		
234																	
235		Lys	Val	Gln	Trp	Lys	Val	Asp	Asn	Ala	Leu	Gln	Ser	Gly	Asn	Ser	Gln
236		145					150					155					160
237	•			_		_	_										
238		Glu	Ser	Val	Thr		Gln	Asp	Ser	Lys		Ser	Thr	Tyr	Ser	Leu	Ser
239						165					170					175	
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243		בות	Cvc	Glu	77a l	Thr	uie	G] n	Glv	T.Ou	Cor	Cor	Dro	v-1	Thr	Lys	Sor
245		AIG	СуБ	195	vaı	1111	1113	GIII	200	пец	Der	Der	FIO	205	1111	цуз	per
246				173					200					203			
247		Phe	Asn	Ara	Gly	Glu	Cvs										
248			210	3	1		-1-										
249	(2)	INFOR		ON I	FOR S	SEQ I	D NC	0:6:									
250																	
251		(i)			CHA												
252					IGTH :				cids	3							
253					?E: a												
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255			(D)	TOI	POLOC	Y: 1	linea	ır									
256		/ 2 * \$,		
257		(ii)	MOLE	CULE	TYE	E: E	epti	ae									
258																	

SEQUENCE VERIFICATION REPORT PATENT APPLICATION US/09/618,380

DATE: 11/09/2001 TIME: 21:36:52

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Original Text

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Wrong application Serial Number

(A) APPLICATION NUMBER: US 08/397,411

SEQUENCE MISSING ITEM REPORT PATENT APPLICATION US/09/618,380

DATE: 11/09/2001 TIME: 21:36:52

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SEQUENCE CORRECTION REPORT PATENT APPLICATION US/09/618,380

DATE: 11/09/2001 TIME: 21:36:52

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Line

Error

Original Text

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Wrong application Serial Number

(A) APPLICATION NUMBER: US 08/397,411

SEQUENCE MISSING ITEM REPORT PATENT APPLICATION US/09/618,380

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